

育鼎精密工業股份有限公司 ACRON PRECISION INDUSTRIAL CO., LTD

桃園縣八德市廣德里新興路 55 號

No.55, SinSing Road., Bade City, Taoyuan County 334, Taiwan(R.O.C)

TEL: 886-3-3629889 FAX: 886-3-3664917

口東莞睦永電子有限公司 (AMMI)					電子有限公司			有限公司	
REVISION: I ECR/ECN INFORMATION: I			PRODUCT NO		BTC31	SERIES	6	SHEET No	
Α	EC No: DATE:	PDR-A150 2015/06/		PRODUCT NAME	1 Pin Pogo Pin H=3.25mm				1 of 5
DOCUM	DOCUMENT NUMBER: CRI			ATED / REVISE	ED BY:	CHECKE	O BY:	APPROV	ED BY:
PS-BC-0106				TOM		JERRY.1	TUNG	KIMI.I	HSU



1.0 SCOPE

This specification defines the related performance of the 1 Pin Pogo Pin.

2.0 PRODUCT DESCRIPTION

This Pogo Pin consists of one contact pin, one spring, one solder pads for materials, plating see below Product Name: BTC31 SERIES

3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

See product drawing (according to the newest revised edition) and other sections of this specification for the relevant reference documents and specifications. In cases where the specification differs from the product drawings, the product drawings take precedence.

4.0 RATINGS

4.1	Rated Current (per contact)	1 Amp Max.
4.2	Rated Voltage	12 V DC RMS .
4.3	Operating temperature range	-40°C~ +85°C .

5.0 ELECTRICAL PERFORMANCE

Test Ref.	ltem	Test Condition	Requirements		
5.1	Examination of Product	Meets requirements of product drawing. No physical damage.	Specimens shall be investigated by 10x (or higher) microscope.		
5.2	Contact Resistance	Mate connector with circuit of 20mV, 100mA Max. Measured from pin side to shaft side,deflection 2.70mm Working Height EIA 364-23	50 mΩ Max.(Initial)		
5.3	Current Rating	Apply the rated current to connector, EIA 364-70	Temperature rise: 30°C Max.		

REVISION:	ECR/ECI	N INFORMAT	ION:	PRODUCT NO		BTC31 SERIES	SHEET No			
Α	EC No: DATE:	PDR-A150028 PRODUCT 2015/06/30 NAME			1 P	2 of 5				
DOCUMENT NUMBER: CRI			CRE	ATED / REVISE	ED BY:	CHECKED BY:	APPROV	ED BY:		
PS-BC-0106				TOM		JERRY.TUNG	KIMI.I	HSU		



6.0 MECHANICAL PERFORMANCE

Test Ref.	ltem	Test Condition	Requirements
6.1	Durability	Operation Speed: 10~20cycles/minute. Durability Cycles: 5000 Cycles EIA 364-09C	[Contact Resistance]: 50mΩMaximum,
6.2	Normal Force	Measure normal force at contact point, deflection 2.70mm Working Height EIA-364-04	[Normal force]: 80g MIN
6.3	Vibration	Subject mated connectors to 10-500 Hz traversed in 1minutes at 1.52mm amplitude for 2 Hour each of 3 mutually perpendicular planes.98.1 m/s^2 EIA 364-28D	<1µs discontinuity
6.4	Mechanical Shock	Accelerate Velocity: 490m/ s² (50G) Waveform: 11ms Half-sine shock Velocity Change: 3.4m/s No. of Drops: 3 drops each to normal and reversed directions of X,Y and Z axes, totally 18 drops, passing 1mA current during the test. EIA 364-27B	<1µs discontinuity
6.5	Fully compression	Compress connector to 2.35mm W.H. by hand for 10sec	[Appearance]: no damage

7.0 ENVIRONMENTAL PERFORMANCE

Test Ref.	Item	Test Condition	Requirements
7.1	Humidity	Mate connectors: expose to a temperature of 40±2°C with a relative humidity of 90~95% for 96hours Note: Remove surface moisture and air dry 48 hours prior to measurements. EIA 364-31B	[Appearance]: no damage [Contact Resistance]: 50 mΩ maximum
7.2	Low Temperature Exposure	48 hours at -40°C 1hours recovery time EIA 364-59	[Appearance]: no damage [Contact resistance]: 50 mΩ maximum
7.3	High Temperature Exposure	48 hours at +85°C Less than 25% relative humidity 1hours recovery time EIA 364-17B	[Appearance]: no damage [Contact resistance]: 50 mΩ maximum
7.4	Thermal Shock	Place free situation samples in chamber with 10 cycles, and one duration is -40° /(0.5h) \rightarrow 25 $^{\circ}$ /(5minutes Max.) \rightarrow 85 $^{\circ}$ C/(0.5h) \rightarrow 25 $^{\circ}$ C/(5minutes Max.). EIA-364-32C	[Appearance]: no damage. [Contact Resistance]: 50 mΩ maximum

REVISION:	EVISION: ECR/ECN INFORMATION:			PRODUCT NO		BTC31 SERIES	S	SHEET No	
Α	EC No: DATE:	PDR-A150 2015/06/	PRODUCT NAME	1 P	Pin Pogo Pin H≕	3 of 5			
DOCUM	MENT NUME	BER:	CRE	ATED / REVISE	D BY:	CHECKED BY:	APPROVED BY:		
PS-BC-0106			TOM		JERRY.TUNG	KIMI.I	HSU		



7.5	Salt Spray Test	Duration: 48 hours exposure; Atmosphere:salt spray from a 5% solution. Temperature: 35 +1/-2°C EIA 364-26B	[Appearance]: no damage.
7.6	Solderability Test	Dip solder tails into the molten solder(held at 245±5°C for 3 ±0.5 sec. EIA 364-52	[Solder coverage]: 95% Min.
7.7	Resistance to reflow soldering heat	Place connector applicable P.C.B. footprint and float on solder bath at 250 +5/-0°C Reference to following Table A and Fig.1. EIA 364-56	[Appearance]: no damage .

8.0 PACKAGING

Parts shall be packaged to protect against damage during handling, transit and storage.

9.0 RECOMMENDED REFLOW PROFILE

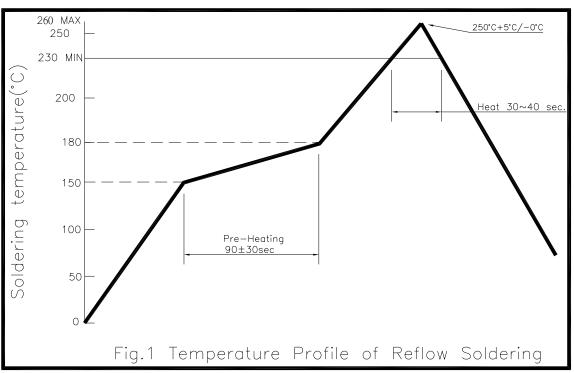


Fig.1

REVISION:	ECR/ECN INFORMATION:			PRODUCT NO		BTC31 SERIES	5	SHEET No		
Α	EC No: DATE:	PDR-A150 2015/06/		PRODUCT NAME	1 P	1 Pin Pogo Pin H=3.25mm				
DOCUMENT NUMBER: CRI			CRE	ATED / REVISE	ED BY:	CHECKED BY:	<u>APPROV</u>	ED BY:		
PS-BC-0106				TOM		JERRY.TUNG	KIMI.I	HSU		



10.0 TEST GROUP

Test Group														
Test Items				•	Test	: Se	Sequence							
Tool items	Α	В	С	D	Е	F	G	H	ı	J	K	L		
Examination of Product	1,5	1,7	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,3	1,3		
Contact Resistance	2,4	2,6	2,4	2,4	2,4	2,4	2,4	2,4	2,4	2,4				
Current Rating	3													
Durability		4												
Normal Force		3,5												
Vibration			3											
Mechanical Shock				3										
Fully compression					3									
Humidity						3								
Low Temperature Exposure							3							
High Temperature Exposure								3						
Thermal Shock									3					
Salt Spray Test										3				
Solderability Test											2			
Resistance to reflow soldering heat												2		
Sample(Pcs)	3	3	3	3	3	3	3	3	3	3	3	3		

REVISION:	ECR/ECN INFORMATION:			PRODUCT NO		BTC31 SERIES	6	SHEET No		
Α	EC No: DATE:	PDR-A150 2015/06/		1 Pin Pogo Pin H=3.25mm						
DOCUMENT NUMBER: CRI			CRE	ATED / REVISE	D BY:	CHECKED BY:	APPROV	APPROVED BY:		
PS-BC-0106				TOM		JERRY.TUNG	KIMI.I	HSU		

ACROR 文件制訂、修訂、廢止申請單

RD-P5-A-001-279

文件編號	PG-BC-0/06	文件名稱	B7C->1-A3-010	d005	Pec.
申請部門	*************************************	申請人	Tiara	日期	6
制訂單位	I FIN	制訂人	Linda	日期	13015
制訂	PDR-	A1500.			£
□ 修 訂	<u> </u>				
□廢止原因說明					
相關單位					
査			Judy 7/1	5	Jet 7/15
核准		Dim	17/15		

A